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HUNTERS POINT
SSIC NO. 5090.3

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To: Hunters Point BCT

From: Christine Shirley, Arc Ecology

I enclose my comments on the Parcel D Risk Management Review Process, dated June 20, 2000.

The Navy reevaluated 19 sites on Parcel D using new toxicological information and a new target cleanup goal of 1 x 10-6 industrial. In addition the Navy made several assumptions, particularly about arsenic and PCBs, that for all practical purposes bring the Navy's proposed cleanup level right back to the original $1 \times 10^{-5}$ goal. The Navy should have conducted the RMR using unadjusted $1 \times 10^{-6}$ industrial cleanup goals.

1. Section 1.0 Introduction sets forth the assumptions used during the risk management review process. We find several of them troubling.

**Assumption 1: Ecological risk need not be considered because Parcel D has no terrestrial habitat.** Unless the City's redevelopment plan prohibits creation of terrestrial habitat, ecological risks must not be ignored. The Navy needs to consider, furthermore, whether pathways exist to contaminate storm water runoff. The RI indicates that copper, for example, is found at the surface in concentrations above levels protective of ecological resources at several sites, including IR-33S, IR-33N, IR-35, and IR-70.

**Assumption 2: Nineteen sites require risk management review.** Why were sites IR-44, IR-48, IR-67, and IR-71 excluded from the RMR? How sites were selected needs to be explained in the Introduction for the RMR.

**Assumption 3: Only soil contamination between 0 and 10 feet below ground surface was evaluated.** How was 10 feet selected? What information does the Navy have to justify the assumption that cleanup to 10 feet is protective of human health, particularly when it is known that this site will undergo extensive excavation during redevelopment? Why should future owners be responsible for remediation below 10 feet?

**Assumption 4: 1998 PRGs were used.**Why did the Navy use 1998 PRGs when 1999 PRGs were available during the review process? The Navy should use 1999 PRGs, or else provide a compelling argument for not using them.

**Assumption 5: Twice HPAL or 22 ppm was used to screen arsenic contamination.** What is the basis for this so-called "rule of thumb" approach? The Navy should use the 1999 Industrial PRG, or HPAL. The Navy's statement that the 1999 industrial PRG for arsenic's non-cancer endpoint is 22 ppm is misleading. The 1999 <u>cancer</u> endpoint for industrial soil is 2.7 ppm. This means that the Navy is proposing a residual <u>industrial</u> cancer risk for arsenic of $8 \times 10^{-6}$. This is an unacceptable risk, especially for the industrial scenario, which is less conservatively drawn than the residential scenario.

All arsenic levels above HPAL should be considered chemicals of concern, even when only "slightly elevated."

**Assumption 6: PCBs were screened at 10 ppm, based upon a 1990 EPA "PCB Action Level" guidance.** We disagree with use of this guidance. The Navy should evaluate PCB according to the 1999 PRGs at a risk level of $1 \times 10^{-6}$. This equates to 1 ppm for total PCBs. It is too early to be making a risk management decision to remediate only to a risk level of $1 \times 10^{-5}$ for PCBs.

Furthermore, detection limits for PCBs and SVOCs at Parcel D are very high. Thus concentrations as reported in the Remedial Investigation Report are unreliable at 1, and sometimes even at 10 ppm for PCBs and SVOCs. The RMR Report makes no mention of this fact. How does the Navy intend to handle samples with very high detection limits? The RI report states that a value equal to one-half the detection limit was added to the sample database only when at least one sample result from a sample set was reported as a measured or estimated value. It appears, from looking at the RI report, that this may be a larger concern for SVOCs than for PCBs.

We suggest that <u>all</u> pre-excavation sampling include PCBs and SVOCs as chemicals of concern.

**Assumption 7: Slightly elevated concentrations of contaminant can be ignored.** We disagree. Set a limit and screen against it. Leave the risk management until the Proposed Plan.

2. Detailed Comments

| IR Site # | Navy CERCLA Recommendation | Navy CAP* Recommendation | Arc Comments |
|---|---|---|---|
| 8 RA-81 | FA | FA | Agree; Arsenic, PCB and SVOC need to be considered COCs. |
| 8 De Minimus areas | NFA | FA | Varies. Generally agree except for Area 9686. PCB and SVOC need to be considered COCs for all IR-8 excavations, even CAP sites. |
| 9 Area 1 | FA | NFA | Agree; PCB and SVOC need to be considered COCs. |
| 9 Area 2 | NFA | NFA | DO NOT CONCUR: Arsenic and PAH. Also Action required box on page 9-9 contains conflicting information. |
| 9 Area 3 | NFA | NFA | Agree. Action required box on page 9-9 contains conflicting information. |
| 16 | Not evaluated | Not evaluated | Provide justification |
| 17 | Not evaluated | Not evaluated | Provide justification |
| 22 | NFA | NFA | Agree. Copper may be a problem. |
| 32 | NFA | FA | DO NOT CONCUR. High SVOC detection limits. |
| 33N | NFA | FA | DO NOT CONCUR: High SVOC. Chrome |

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|---|---|---|---|
| | | | VI at Area 7560. Arsenic in 7657. Find source of benzene in groundwater. |
| 33S Areas 1 & 2 | NFA | FA | DO NOT CONCUR. High SVOC detection limits. Copper at surface. PCB at areas 1 and 2. |
| 33S Area 3 | NFA | unclear | Agree. |
| 33S Area 8169 | NFA | Unclear | DO NOT CONCUR. Chromium needs to be addressed. |
| 34 | NFA | FA | DO NOT CONCUR. High SVOC detection limits. |
| 35 | NFA | FA | DO NOT CONCUR. High PCB and SVOC detection limits. Copper. |
| 37 | RA | NFA | Agree |
| 44 | Not evaluated | Not evaluated | Provide justification |
| 48 | Not evaluated | Not evaluated | Provide justification |
| 53 | NFA | FA | DO NOT CONCUR. High SVOC detection limits. Arsenic above HPAL. |
| 55 | NFA | NFA | DO NOT CONCUR. Arsenic and lead exceed industrial screening levels. High SVOC detection limits. Arsenic above HPAL. |
| 65 | FA | FA | Agree. SVOCs must be COC. |
| 67 | Not evaluated | Not evaluated | Provide justification |
| 68 | NFA | FA | DO NOT CONCUR. High PCB detection limits. Arsenic above HPAL. |
| 69 | NFA | FA | DO NOT CONCUR. High SVOC detection limits. Arsenic above HPAL. |
| 70 | NFA | FA | DO NOT CONCUR. High SVOC detection limits. Arsenic above HPAL. Copper |
| 71 | Not evaluated | Not evaluated | DO NOT CONCUR. High SVOC and PCB detection limits. |

* Petroleum screening value = 1000 ppm TPH